

Austerity, Immigration or Globalisation: Was Brexit predictable?

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The UK vote to leave the European Union is widely seen as a watershed moment in UK history and European integration. Why did some areas vote to leave the EU, and others to remain? What lessons can be drawn from the referendum other than the result itself?

Introduction

The UK referendum on European Union membership on 23 June 2016 is a key moment for European (dis)integration. Even though the outcome had been expected to be tight, in the days running up to the referendum bookmakers and pollsters predicted the Remain side to win. Many observers were left puzzled and keen to understand who voted for Leave.

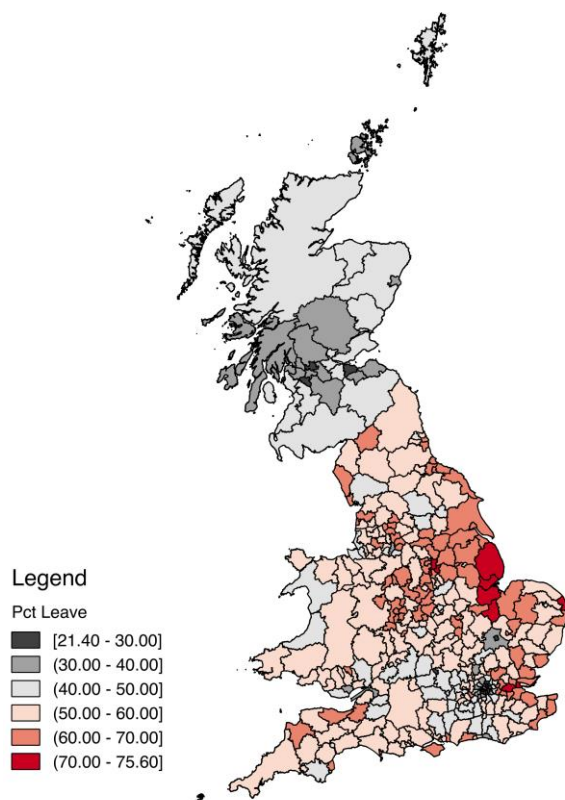
There are two complementary ways to approach the result. One is to try to understand broad patterns, i.e., to ask “Were some factors more important than others in explaining the overall pattern of the vote?” This perspective does not pose causal questions, i.e., it does not ask about counterfactuals: “How would regions have voted if, instead of experiencing X, they had experienced Y?” A researcher would have set up a randomized control trial before the referendum and exposed some regions or voters to one type of experience, and others to an alternative experience, to analyse how random exposure to an experience affects voting behaviour. We can get close to this by trying to consider situations where, beyond their control, some regions/voters were exposed to different experiences – not by a team of researchers but by changes in economic policies – and exhibited differential voting patterns.

In this paper, we present evidence on these two complementary perspectives. We start by summarizing findings on the broad patterns of the Brexit vote. After that, we ask specifically whether austerity had a causal effect on the Brexit vote, i.e., whether less austerity after 2010 would have resulted in a lower Leave share.

Broad patterns of the Brexit vote

After the referendum, various newspapers and blogs quickly reported plots relating the referendum vote to key characteristics such as the age profile of the population (Burn-Murdoch 2016). It was also pointed out that the Brexit vote relates to class identification and social attitudes more generally (Kaufmann 2016a). In recent research (Becker, Fetzner and Novy 2017), we follow these early contributions and analyse the vote in more detail. We study the result in England, Wales and Scotland, in a disaggregated way across 380 local authorities (and across 107 wards in four English cities). We relate the vote to fundamental socio-economic features of these areas. Figure 1 plots the Leave shares across the local authority areas (excluding Northern Ireland and Gibraltar).

Figure 1: Map of the Leave share (in percent) across local authority areas in the 2016 EU referendum.



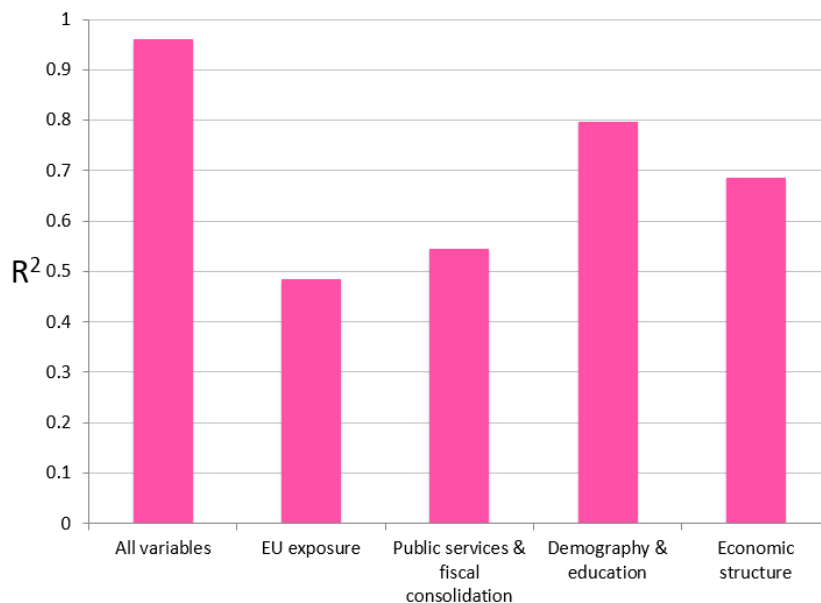
Socio-economic characteristics

We capture different subsets of socio-economic variables that best ‘predict’ the actual referendum result. We cannot possibly give a comprehensive causal explanation because the outcome is obviously multi-causal and multi-faceted. In other words, our results reflect a broad range of correlations.

Figure 2 reports the goodness of fit in regressions that use different sets of explanatory variables. This helps to shed light on the relative explanatory power of different factors in an area’s Leave vote. For example, demography and education (i.e., the age and

qualification profile of the population across voting areas) explain just under 80 percent of the Leave share. The economic structure explains just under 70 percent. Variables in this group include: the employment share of manufacturing, unemployment and wages. Socio-economic variables capture variation in socio-economic deprivation (or not) across the UK and collectively explain a substantial share of the variation in the Referendum result. We will return later to the question of whether deprivation may itself be the result of other factors, such as austerity.

Figure 2: Goodness of fit (measured as R-squared) in separate regressions explaining the Leave share at the local authority area level using only regressors from the respective group of variables.



EU exposure and immigration

Surprisingly, and contrary to much of the political debate in the run-up to the election, we find that relatively little variation (under 50 percent) in the Leave share can be explained by measures of a local authority area’s exposure to the European Union. These measures include a local authority’s trade exposure to the EU (albeit measured at a coarser spatial resolution), its receipts of EU structural funds, and most importantly, the extent of immigration. We find evidence that the *growth rate* of immigrants from the 12 EU accession countries that joined the EU in 2004 and 2007 is linked to the Leave share. This link mirrors findings in Becker and Fetzer (2016) on the role of immigration from Eastern Europe in explaining the growth of UKIP. It stands in contrast to migrant growth from the EU 15 countries or elsewhere in the world. It suggests that migration from predominantly Eastern European countries has had an effect on voters, albeit quantitatively very small. However, we cannot identify the precise mechanism – whether the effect on voters is mainly economic through competition in the labour and housing markets, or is felt as changing social conditions.

Fiscal consolidation

In the wake of the global financial crisis, the UK coalition government brought in austerity measures to reduce government spending and the fiscal deficit. At the level of local authorities, spending per person fell by 23.4 percent in real terms, on average, from 2009/10 until 2014/15. But the extent of total fiscal cuts varied dramatically across local authorities, ranging from 46.3 percent to 6.2 percent (see Innes and Tetlow 2015). It is important to note though, that fiscal cuts were mainly implemented as de facto proportionate reductions in grants across all local authorities. This setup implies that reliance on central government grants is a proxy variable for deprivation, with the poorest local authorities being more likely to be hit by the cuts. This makes it impossible in the cross-section to distinguish the effects of poor fundamentals from the effects of fiscal cuts. This is why, in the second part of this paper, we highlight new work by Fetzer (2018) which focuses on the role of austerity in explaining Brexit. For now, ignoring causality, our results suggest that local authorities experiencing more fiscal cuts were more likely to vote in favour of leaving the EU.

Which factors explain more of the variation in the Leave share?

Demography, education and economic structure, i.e., fundamental, slow-moving factors, explain more of the variation in the Leave share compared to direct measures of EU exposure e.g. through migration or trade exposure. The observation that connects this and other purely correlational exercises is that Leave supporting areas stand out by being more deprived, having lower levels of income and life satisfaction, having fewer high status-jobs and an overall weaker economic structure, and having an ageing demographic and lower levels of educational attainment (also see Alabrese, Becker, Fetzer and Novy forthcoming).

Variables describing the socio-economic situation of the resident population in an area do a very good job of capturing the variation in support for Leave across the UK. Yet, the central question that these exercises cannot answer is what causally explains *why* voters in these areas were so prone to support Leave?

Going beyond correlations: The role of austerity

The first part of the analysis, being purely descriptive, suggests socio-economic correlates are good proxy variables for the characteristics of areas that supported Leave. The key concern with this analysis is that it is silent on the causal factors through which the prevalence of a low educational profile of the resident population in an area and other features become so tightly related with support for Leave. While Euroscepticism has been more prevalent for longer in the UK compared to other European countries, the factors that induced some voters to adopt Eurosceptic positions in *recent* years are important, as it is probably those voters who tipped the scale in favour of Leave.

A recent paper (Fetzer, 2018) presents evidence that austerity measures since 2010 may have had substantive impacts on the referendum, pushing undecided voters towards UKIP and Leave. The welfare reforms since 2010 may provide the link that the early cross-

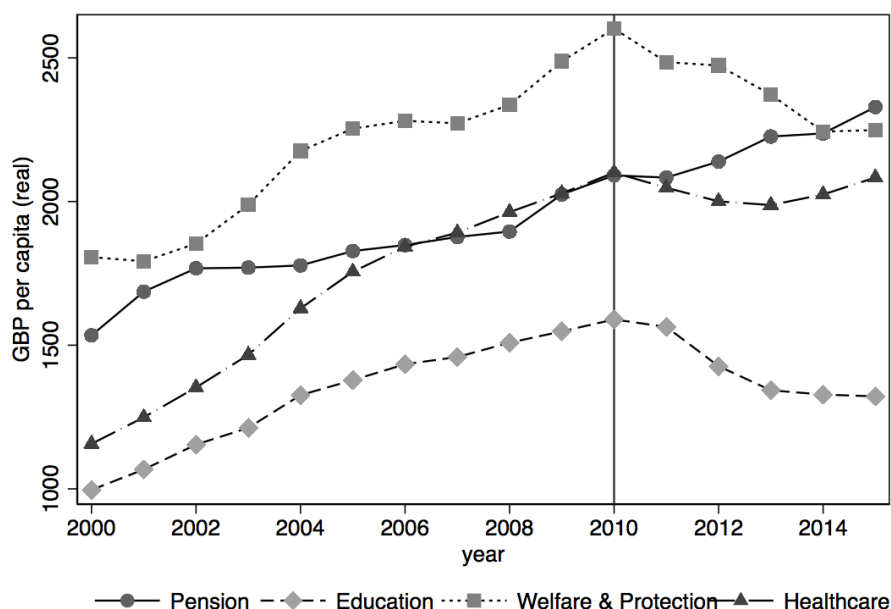
sectional analysis of the referendum result uncovered: areas with weak socio-economic fundamentals were much more prone to support Leave. Many residents in these areas were affected by the austerity-induced welfare reforms.

Austerity since 2010

The effects of austerity since 2010 were widely felt. Aggregate figures suggest that overall government spending for welfare and protection contracted by 16 percent in real per capita terms (see Figure 3 below), reaching levels last seen in the early 2000s. While the NHS was ringfenced from direct cuts, the rapidly ageing population induced significant increases in demand for healthcare, worsening the quality and access for many and contributing to the now regular winter crises.

Furthermore, overall public spending on education also contracted, while spending on pensions steadily increased in real terms – a dramatic shift in the overall composition of government spending.

Figure 3: Overall public sector spending in GBP per capita (real). Data are from HMRC and ONS.

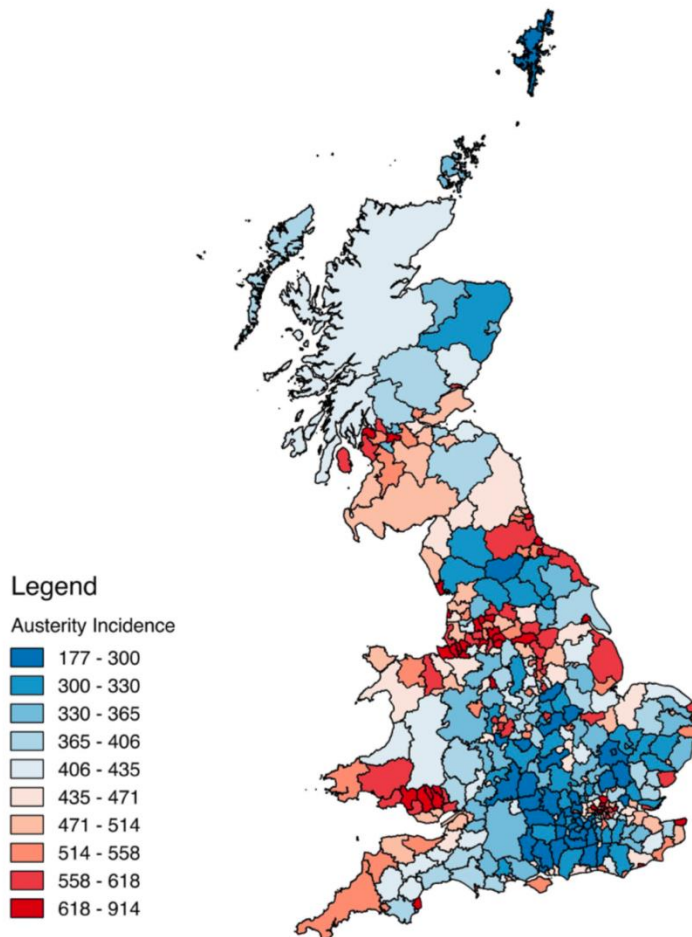


At the level of local authority districts, spending per person fell by about 23 percent in real terms between 2010 and 2015 and the poorest areas were hit the hardest, with spending falling by as much as 46 percent in some areas (Innes and Tetlow, 2015). In 2013, it was estimated that many of the measures included in the Welfare Reform Act of 2012 would cost every working-age Briton, on average, about £440 per year (Beatty and Fothergill, 2017).

The impact was far from uniform across the UK, as shown in Figure 4. It varied from around £914 per working-age adult in Blackpool to just above £177 in the City of London.

The overarching observation was that the most deprived areas were most severely affected by the cuts, as they had the highest numbers of people receiving benefits to begin with.

Figure 4: Distribution of austerity shock simulated by Beatty and Fothergill (2013) and used in Fetzer (2018). The measure is expressed in financial losses per working-age adult per year.



Linking austerity with support for UKIP and Leave

The empirical analyses in Fetzer (2018) are among the most comprehensive studying UKIP and support for Leave. Exploiting data from all electoral contests across the UK since 2000, together with detailed individual-level panel data, the research documents a robust and tight link between austerity and support for UKIP. These effects only become present after the austerity measures took effect in 2010 and the timing of the effects is consistent with individual welfare reforms being implemented.

The austerity-induced increase in support for UKIP is sizeable and suggests that the referendum could have gone the other way if not for austerity. Estimates suggest that in districts that received the average austerity shock, UKIP vote shares were on average

3.58 percentage points higher in the 2014 European elections and 11.62 percentage points higher in the most recent local elections prior to the referendum, compared to districts with little exposure to austerity.

The tight link between UKIP vote shares and an area's support for Leave implies that Leave support in 2016 could have been up to 9.51 percentage points lower had the austerity shock not happened. That would have swung the referendum result clearly in favour of Remain.

These effects are detectable in aggregate voting outcome data and when looking at how individuals' political preferences shifted after a benefit cut. One welfare reform; the "bedroom tax.", implied reductions in housing benefits for households living in social housing judged too large relative to their needs (with an 'excess' bedroom; some Government communications informally referred to the policy as ending the "spare room subsidy"). The results suggest that households exposed to the policy increasingly shifted towards supporting UKIP and experienced economic grievances as they fell behind with their rent payments due to the cut to housing benefits. Some moved to less spacious housing.

Further, dissatisfaction with the political status quo grew distinctly among the population affected by welfare cuts. Those respondents saw an increase in their tendency to express the view that public officials do not care, that they have no say in what the government does and that their vote does not matter. Each of these factors is strongly related to support for Leave.

Thus, the paper (Fetzer, 2018) argues that austerity – by curtailing the welfare state – has likely activated a broad range of long standing economic grievances.

On the economic origins of austerity-activated grievances

Economic distress has been linked to increasing support for right-wing political platforms world-wide (see Dehdari, 2018). Identifying and quantifying the relative contributions of different factors that cause underlying economic grievances, especially among the low-skilled, is an active field of research.

For example, Colantone and Stanig (2018) suggest that trade integration with low income countries has hurt areas in the UK that produce manufactured goods by intensifying competition, which is why voters in these areas have been more likely to support Leave. Similar evidence linking economic hardship due to trade integration, to populist or extreme voting is being documented in the context of the US and Germany (see Dippel et al., 2015, Autor et al., 2018).

Similarly, evidence is mounting that some forms of immigration have small but detectable effects on labour markets by curtailing wage growth at the bottom end of the wage distribution (for evidence from the UK see Becker and Fetzer, 2018 or Dustman et al., 2013).

Automation may also suppress wage growth among the low-skilled by reducing demand for low-skilled workers (Graetz and Michaels, 2018). In the historical context, this type of (manual) labour-saving technological progress has been linked to political unrest (Caprettini and Voth, 2015). The rise of the gig economy, zero-hours contracts and other forms of underemployment may also push people to depend on the welfare state to top up salaries (Bell and Blanchflower, 2018). Each of these factors is likely to exacerbate the economic cleavages between the well-educated and those with low human capital – a phenomenon referred to as the growing skill bias (see Card and DiNardo, 2002) in labour markets.

The natural implication is well known to economists: trade integration and globalisation are complements to the welfare state. There are people who suffer from globalisation, so to maintain support for open trade there must be a policy response to assist those who are made worse off. There is a lot of demand for policies to revive social services and social infrastructure in the areas hit hardest by globalisation are in demand, with support for job seekers, education, housing and community health all being possible targets.

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